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## PRIVILEGED & CONFIDENTIAL

Vessel Survey Report No. 2055

Surveyed at Rocky Neck Marine Railways, E. Gloucester, MA Date of Survey 17 April 2005

Vessel surveyed: 'BARBARA ANN' Legnos 35 Hard-chine Lobsterboat/Scalloper

Survey commissioned by: Mr. Stephen M. Ouellette, Esquire

> Cianciulli & Ouellette 163 Cabot Street

Beverly, Massachusetts 01915

Purpose of survey: Valuation

## DISCUSSION

'STANDARDS & RECOMMENDED PRACTICES FOR SMALL CRAFT' (ABYC), 'PLEASURE AND COMMERCIAL MOTOR CRAFT # 302' (NFPA) and the 'COMMERCIAL FISHING VESSEL SAFETY ACT OF 1988' are utilized in compiling this report; individual reference to subchapters of the above is not made within the body of this report.



## **VESSEL DATA**

LOA: 35' 00" Beam: 12' 06" Draft: 4' 06"

Displacement: Unknown
Builder: Legnos
Year built: 1985

Hull No.: LBK00L23K586
Builder's Hull No.: Unknown
Official No.: 699442
Gross tons: Unknown
Net tons: Unknown
Homeport (off.): Gloucester, MA
Berthed: Gloucester, MA

#### **HULL & DECK**

This vessel was observed out of the water for hull inspection, stored on Brownell stands and blocking at the Rocky Neck Marine Railways, E. Gloucester, MA; she presents a very unkempt and ragged cosmetic appearance after undergoing twin sinkings during the early part of 2005 at Rocky Neck, E. Gloucester, MA. 'BARBARA ANN' is a lobsterboat built on a semi-displacement bottom hull configuration with a wide beam, low center of gravity and great flare at the bow. She is hard chined with a cut-away transom face.



Starboard side outboard profile of 'BARBARA ANN'.

Her interior accommodations include a V-berth forward with twin berths fitted and storage lockers beneath., a small galley is to port with a stainless steel sink and a now-defunct microwave oven. An enclosed head could be fitted to starboard as the space has been allocated and there was a manual shower and small sink fitted.

The wiring harness in this space needs replacement as there is much salt water verdigris.

The wheelhouse is up and next aft with an enclosed painted fiberglass encapsulated plywood house with hardwood supports and frames on various centers with an opening side panels to starboard at the pot hauling station to starboard. The helm station, VOLVO-PENTA engine function gauge panel and hydraulic controls are, likewise, fitted to starboard. Plywood is utilized as hatch covers for the engineroom below where, originally, fiberglass panels were fitted. Side and forward windows are of Plexiglass and are mechanically fastened to the plywood sides. All electronic navigation components were not aboard at time of inspection.

The fold-up panel to starboard has been damaged and needs repair.

The pot hauling arm to starboard has had it's mounting bolts sheared away and needs inspection & repair.

The wiring harness in this space needs replacement as there is much salt water verdigris.



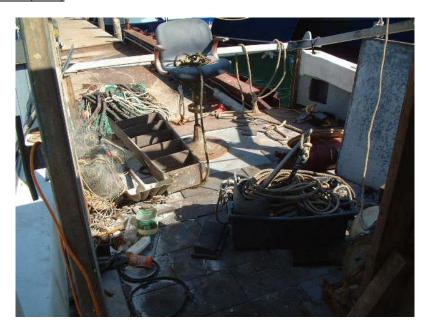
Wheelhouse, looking forward.

The welldeck is next aft with an additional engine control station to starboard aft. A hydraulically actuated, chain-driven wire winch with an 18" reel and ½" 6 x 19 galvanized wire (wire is, and has been, in poor condition) The transom is cut-away in the traditional sense to ease setting of lobster gear and scallop gear/nets. A 5/16" x 3" x 3" aluminum A-frame is well mounted amidships to white oak bases and through the deck; this was partially dismantled at time of survey, but appears complete.

The deck hatch is fabricated of plywood and needs replacement.

The workdeck is cluttered with debris and components.

Many of the 12" x 24" asphalt tiles are missing on the centerline aft.



Workdeck, looking aft from wheelhouse.



Hydraulic winch mounted on centerline.

Her hull is constructed of alternate layers of hand-laid fiberglass mat and woven roving with additional layers of fiberglass roving in high stress areas (stem, chines and transom). Additionally, the hull is further reinforced with AIREX foam coring throughout; the hull is further stiffened by four fiberglass encapsulated longitudinal stringers (4" inboard and 3/4" outboard) that extend from the forefoot of the vessel to the transom. Interior transverse bulkheads are of 1" and doubled up marine plywood held to the inside of the hull with 4-6" of fiberglass tabbing; interior plywood

joinery is held to the hull sides with mechanical fasteners and fiberglass tabbing.

All interior tabbing and structural members are in good condition with no signs of de-lamination or rough service noted. The exterior of the hull was tapped by phenolic hammer and no signs of voids or de-lamination of the hull was found with the exception of the transom face which is totally de-laminated and separated from the workdeck at the transom wall. This is pre-existing damage not a result of the sinking.



De-laminated transom wall at deck edge.



Crude repairs attempted at corner of transom; these have failed.

There are the usual gouges, nicks and scratches of the topside gelcoat. The bottom anti-fouling paint system has failed.

The deck is sheathed with 1 1/2" laminated plywood well coated with fiberglass and sealed; additional support is afforded to the deck by longitudinal and transverse white oak frames at irregular intervals. A BOMAR dogging aluminum hatch and four dogging PVC side ports are fitted.

#### **MECHANICAL**

A 1994 VOLVO (model TAMD 71B, s/n 8868284 – 1101041719/47787) six cylinder, turbo-charged diesel powers what appears to be a TWIN DISC 1.77:1 reduction gear thence to a tapered stainless steel 1 5/8" shaft to a four bladed 24 x 26 bronze propeller. The running gear passes through a PSS self-adjusting shaft seal and a fiberglass shaft tube with an outside raw water cooled cutlass bearing well bolted to the hull, fine. Running gear is in good alignment. The engine hour meter was not present at time of survey and it is understood that the main engine was majored in 2002 with no documentation provided. The main engine was immersed twice in early 2005 due to the sinking of the vessel. It is understood that the starter and alternator were repaired and the engine was re-started after the 2<sup>nd</sup> sinking. The main engine and her components were not operated at time of inspection.

The fiberglass shaft tube needs proper support just aft of the packing gland.

The PSS self-adjusting packing gland needs close inspection due to both sinkings.

The main engine and her components needs inspection and possible repairs.

The main engine controls are frozen and/or broken, replace.

The main engine wiring and gauge panel will require inspection and possible repair/replacement.



VOLVO main engine.

#### MECHANICAL (cont.)

MORSE controls (from both stations) and an alarmed panel with SW gauges will need replacement.

#### Engineroom is filled with standing oil/water.

The engine is fresh water cooled via bronze sea cock and raw water strainer before the heat exchanger; exhaust is vented (wet) via turbocharger, raised loop, approved hoses and clamps with a VERNATONE muffler and fiberglass tubing for discharge at the transom. The main engine was not operated at time of survey.

A single 200 gallon fiberglass fuel tank is fitted under the cockpit sole just aft of the engineroom; this could not be inspected at time of survey. Fuel fill, vent, supply lines and returns are in need of replacement. A RAYCOR fuel/water separator and shut-off valves are installed inline.

Steering is via a manual hydraulic HYDROSLAVE steering system from the helm station; this was operable at time of survey. A 1 1/2" stainless steel rudder post and a 1/4" stainless steel rudder blade and rests on a stainless steel/bronze skeg directly bolted to the centerline fiberglass keel, fine. Bronze flax packing gland is fitted.

A small HYDRO-SLAVE hydraulic reservoir with inline GRESEN filter is mounted onto the bulkhead with approved pressure fitted hose to the PITT vane pump located on the shaft to the front of the main engine; an electric clutch controls power to this unit. Hydraulic power is supplied to the wire winch on the workdeck.

#### **ELECTRONICS**

The vessel is equipped with three 8D batteries; the DC system is in total need of replacement and upgrade having been immersed in salt water.

Completely renew the DC wiring harness to ABYC standards for commercial vessels.

## SAFETY

The following safety gear is aboard:

- 1.) One size I dry chemical extinguishers.
- 2.) One heavy duty RULE bilge pump,
- 3.) Anchor and sufficient rode.

It is the responsibility of the owner to properly provide all mandated U.S. Coast Guard safety gear.

## SINKING RELATED DISCUSSION

The vessel suffered two sinkings in the winter of 2005. Equipment affected were as follows:

1.) Missing aluminum deck hatch	\$ 300.00
2.) Wiring harness for DC circuit	\$ 3,800.00
3.) Main engine gauge panel	\$ 1,200.00

## SINKING RELATED DISCUSSION (cont.)

The vessel's navigation electronics survive at the Rocky Neck Shipyard Office.

## **VALUATION**

Current market value for this craft in it's current material condition to a willing buyer is \$ 30,000.00.

## **COMMENTS**

This craft has been the subject of two known sinkings in early 2005 and the true value in the vessel, such as it is as she currently exists, is in her hull. All electronic and mechanical systems are suspect and require further exploratory and repair/replacement before any reliance can be assumed to this gear.

This inspection was conducted for the purposes of establishing a current market valuation for the hull only. Federal Fishing Permits carried by this vessel were not taken into account when establishing market value for this vessel.

/s/ Joseph Lombardi